PATENT

I hereby certify that on the date specified below, this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to Commissioner for Patents, U.S. Patent & Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450.

April 19,2004

Paula M. Loud

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Applicant** 

: Clarence T. Tegreene

Application No.

10/813,967

Title

MOTE NETWORKS HAVING DIRECTIONAL

**ANTENNAS** 

Filed

: March 31, 2004

Examiner

To Be Assigned

Art Unit

To Be Assigned

Docket No.

0104-003-006-000000

Date

April 19, 2004

Commissioner For Patents P.O. Box 1450 Alexandria, VA 22313-1450

# SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(d), Applicant brings to the attention of the Examiner the documents listed on the attached PTO-1449 (substitute form). Applicant respectfully requests that the Examiner consider the listed documents and evidence that consideration by making appropriate notations on the attached form. Pursuant to 37 CFR 1.98(a)(2), copies of the foreign patent documents and non-patent literature are attached.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If it should be determined that any of the listed documents do not constitute "prior art" under United States law, Applicant reserves the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

Applicant further reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

Respectfully submitted,

Clarence T. Vegreene

Dale R. Cook

Registration No. 42,434

DRC:pl

**Enclosures:** 

Postcard Form PTO-1449 (substitute) Copies of 38 Cited References

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V:\Patent Legal\A-PATENTS FILED\Data Architecture Apps\0104-003-006-Mote Networks Having Directional Antennas\IDS-Supplemental.doc

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# SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS

Application Number 10/813,967
Filing Date March 31, 2004
First Named Inventor Clarence T. Tegreene
Group Art Unit To be Assigned
Examiner Name To be Assigned
Attorney Docket Number 0104-003-006-000000

		U.S. PAT		
Examiner Initials	Cite No.	U.S. Patent Number	Name of Patentee	Date of Publication (MM-DD-YYYY)
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		FOREIGN PATEN	T DOCUMENTS		
Examiner Initials	Cite No.	Document Number	Country	Date of Publication (MM-DD-YYY)	English Translation Provided?
	AB				

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	(	OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date. page(s), volume-issue number(s), publisher, city and/or country where published.
	AC	BERKELY WEBS: WIRELESS EMBEDDED SYSTEMS, "Building Sensor Networks with TinyOS" May 5, 2003 Mobisys Tutorial, San Francisco Powerpoint Presentation, Culler, David; Levis, Phil; Szewczyk, Rob; Polastre, Joe; pp. 1-41 located at <a href="http://webs.cs.berkeley.edu">http://webs.cs.berkeley.edu</a> , printed on 04/15/04.
	AD	BERKELEY WEBS: WIRELESS EMBEDDED SYSTEMS, "Publications", pp. 1-3, located at <a href="http://webs.cs.berkeley.edu/publications.html">http://webs.cs.berkeley.edu/publications.html</a> , printed on 04/12/04
	AE	BERKELEY WEBS: WIRELESS EMBEDDED SYSTEMS, "Tiny OS a component-based OS for the networked sensor regime", "Latest News", pp. 1-2 located at <a href="http://webs.cs.berkeley.edu/tos/">http://webs.cs.berkeley.edu/tos/</a> , printed on 01/27/04.
	AF	BERKELEY WEBS: WIRELESS EMBEDDED SYSTEMS, "Tiny OS a component-based OS for the networked sensor regime", "Publications/Presentations", pp. 1-3 located at <a href="http://www.tinyos.net/media.html">http://www.tinyos.net/media.html</a> , printed on 04/13/04.
	AG	BERKELEY WEBS: WIRELESS EMBEDDED SYSTEMS, "Tiny OS a component-based OS for the networked sensor regime", "Related UC Berkeley Work", pp. 1-9 located at <a href="http://webs.cs.berkeley.edu/tos/related.html">http://webs.cs.berkeley.edu/tos/related.html</a> , printed on 01/27/04.
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	AI	BERKELEY WEBS: WIRELESS EMBEDDED SYSTEMS, "Tiny OS Tutorial Lesson 8: Data Logging Application", pp. 1-4 located at <a href="http://webs.cs.berkeley.edu/tos/tinyos-1.x/doc/tutorial/lesson8.html">http://webs.cs.berkeley.edu/tos/tinyos-1.x/doc/tutorial/lesson8.html</a> , printed on 04/15/04.
	AJ	CENTER FOR THE BUILT ENVIRONMENT, "XYZ On A Chip: Integrated Wireless Sensor Networks for the Control of the Indoor Environment in Buildings" pp. 1-2, located at <a href="http://www.cbe.berkeley.edu/research/briefs-wirelessxyz.htm">http://www.cbe.berkeley.edu/research/briefs-wirelessxyz.htm</a> , bearing a date of 2002, printed on 01/27/04.

Examiner	Date	
Signature	Considered	

# SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS Application Number Filing Date First Named Inventor Group Art Unit Examiner Name To be Assigned To be Assigned Attorney Docket Number 0104-003-006-000000

	(	OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date. page(s), volume-issue number(s), publisher, city and/or country where published.
	AK	CITRIS, "Brainy Buildings Conserve Energy" p. 1-3 located at <a href="http://www.citris.berkeley.edu/applications/energy/smartbuildings.html">http://www.citris.berkeley.edu/applications/energy/smartbuildings.html</a> , printed on 01/27/04.
	AL	CITRIS, "The Real World as One Giant Database" pp. 1-3 located at <a href="http://www.citris.berkeley.edu/newsletter/2003">http://www.citris.berkeley.edu/newsletter/2003</a> Newsletters/december 2003/feature.ht <a href="mailto:mg">mg</a> , bearing a date of 2003, printed on 04/09/04.
	AM	"Data Repository", University of California Berkeley, located at <a href="http://localization.millennium.berkeley.edu/data_repository.html">http://localization.millennium.berkeley.edu/data_repository.html</a> , pp. 1 of 1, bearing a date of 2001, printed on 04/07/04.
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	AR	ISIS NEST: Institute For Software Integrated Systems; "Middleware: Next Middleware Services", pp. 1 of 1, located at <a href="http://www.isis.vanderbilt.edu/projects.nest/middleware.html">http://www.isis.vanderbilt.edu/projects.nest/middleware.html</a> , printed on 04/14/04.
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	AV	ISIS NEST: Institute For Software Integrated Systems; "People: The NEST Group", pp. 1 of 1, located at <a href="http://www.isis.vanderbilt.edu/projects.nest/people.html">http://www.isis.vanderbilt.edu/projects.nest/people.html</a> , printed on 04/14/04.
	AW	JOHNSON, R. COLIN, "Companies test prototype wireless-sensor nets" EE Times, pp. 1-3, printable version of article located at <a href="http://www.eet.com/article/showArticle.jhtml?articleID=9900910">http://www.eet.com/article/showArticle.jhtml?articleID=9900910</a> , bearing a date of 01/29/03, printed on 01/27/04.

Examiner	Date	
Signature	Considered	

## 10/813,967 Application Number SUPPLEMENTAL INFORMATION Filing Date March 31, 2004 DISCLOSURE STATEMENT BY Clarence T. Tegreene First Named Inventor APPLICANTS To be Assigned Group Art Unit To be Assigned Examiner Name 0104-003-006-000000 Page 3 of 4 Attorney Docket Number OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS Examiner Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item Initials (book, magazine, journal, serial, symposium, catalog, etc.), date. page(s), volume-issue number(s), No. publisher, city and/or country where published. KAHN, KEVIN C.; CULLER, DAVID E.; "Ad Hoc Sensor Networks A New Frontier AXfor Computing Applications" bearing a date of April 2002, printed on 04/09/04. KLING, RALPH, "Intel® Research Mote" pp. 1-13, Powerpoint Presentation, located AY at http://webs.cs.berkeley.edu/retreat-1-03/slides/imote-nest-q103-03-dist.pdf, Intel Corporation Research, Santa Clara, CA, printed on 04/13/04. LEVIS, PHILIP; CULLER, DAVID; "Maté: A Tiny Virtual Machine for Sensor AZNetworks", pp. 1-11, printed on 04/12/04 LEVIS, PHILIP; MADDEN, SAM; GAY, DAVID; POLASTRE, JOSEPH; BA SZEWCZYK, ROBERT; WOO, ALEC; BREWER, ERIC; CULLER, DAVID; "The Emergence of Networking Abstractions and Techniques in TinyOS" pp. 1-14, printed on 04/13/04. LEVIS, PHILIP; PATEL, NEIL; CULLER, DAVID; SHENKER, SCOTT; "Trickle: BBA Self-Regulating Algorithm for Code Propagation and Maintenance in Wireless Sensor Networks", printed on 04/13/04. BC LEVIS, PHILIP; PATEL, NEIL; "Maté: Building Application-Specific Sensor Network Language Runtimes", bearing a date of 11/11/03, printed on 04/12/04 "LOCALIZATION Distributed Embedded Systems" UCLA Computer Science 213: BD Localization Systems Powerpoint Presentation, pp. 1-61, bearing a course name of: CS 213/Estrin/Winter 2003, bearing a speaker name of: Lewis Girod, bearing a date of 02/04/03, printed on 03/15/04. "Localization.Millennium.Berkeley.Edu", University of California Berkeley, located at BE http://localization.millennium.berkeley.edu/introduction.html, pp. 1 of 1, bearing a date of 2001, printed on 04/07/04. "Localization Standards", University of California Berkeley, located at BF http://localization.millennium.berkeley.edu/localization\_standards.html, pp. 1 of 1, bearing a date of 2001, printed on 04/07/04. MARÓTI. MIKLÓS: VÖLGYESI, PÉTER; SIMON, GYULA; KARSAI, GÁBOR; BG LÉDECZI, AKOS; "Distributed Middleware Services Composition and Synthesis Technology"; pp. 1-8, IEEE, bearing a date of 2002, printed on 04/14/04. PESCOVITZ, DAVID, "Robugs: Smart Dust Has Legs" pp. 1-2, located at BH http://www.coe.berkeley.edu/labnotes/0903/pister\_print.html, bearing a date of September 2003, printed on 04/09/04. RAGHUNATHAN, VIJAY; SCHURGERS, CURT; PARK, SUNG; SRIVASTAVA, BI MANI B.; "Energy Aware Wireless Sensor Networks" pp. 1-17; Department of Electrical Engineering, University of California, Los Angeles; printed on 03/15/04. SAVVIDES, ANDREAS; "Hardware", pp. 1-3, located at ΒJ http://nesl.ee.ucle.edu/projects/ahlos/hardware.htm, Networks and Embedded Systems Lab, University of California, Los Angeles; bearing a date of 01/18/03, printed on 02/23/04.

Examiner	Date	
Signature	 Considered	

### Application Number 10/813,967 SUPPLEMENTAL INFORMATION Filing Date March 31, 2004 **DISCLOSURE STATEMENT BY** Clarence T. Tegreene First Named Inventor **APPLICANTS** To be Assigned Group Art Unit **Examiner Name** To be Assigned Attorney Docket Number 0104-003-006-000000 Page 4 of 4 OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS Examiner Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item Initials (book, magazine, journal, serial, symposium, catalog, etc.), date. page(s), volume-issue number(s), No. publisher, city and/or country where published. SAVVIDES, ANDREAS; "Localization Forum", pp.1 of 1, located at BK http://nesl.ee.ucla.edu/projects/ahlos/localization forum.htm, Networks and Embedded Systems Lab, University of California, Los Angeles; bearing a date of 12/24/03, printed on 02/23/04. "The Ad-Hoc Localization System (AHLoS)" Networks and Embedded Systems Lab, BLUniversity of California, Los Angeles; located at http://nesl.ee.ucla.edu/projects/ahlos/Default.htm, pp. 1-4, printed on 02/23/04. "Tiny DB A Declarative Database for Sensor Networks" pp. 1-2, located at BM http://telegraph.cs.berkeley.edu/tinydb/ printed on 04/09/04. TINY SEC: LINK LAYER SECURITY FOR TINY DEVICES, "Calamari: A BN localization system for sensor networks", pp. 1-6, located at http://www.cs.berkeley.edu/~kamin/calamari/ printed on 04/12/04. BO

Examiner	Date	
Signature	 Considered	